NC Response Protocol

<response>	:=	<message><eol>
<message>	:=	
		<start>|<stop>|<execute>|<getwrk>|<quit>|<error>|<end>|<point>| <toolballd>|<toolinfo>
<eol>	:=	<cr><lf>
<start>	:=	<'1'><white><machid><units><progid>
<stop>	:=	<'2'><white><machid>
<execute>	:=	<'3'><white><machid>
<getwrk>	:=	<'4'><white><machid><wrkoffset><x><y><z>
<end>	:=	<'9'><white><machid>
<point>	:=	<'10'><white><machid><featid><index>+
		<x><y><z><a><b><c>
<toolballr>	:=	<'11'><white><machid><probeid><tipid><effballr>
<toolinfo>	:=	<'12'><white><machid><probeid><tipid>+
		<offsetx><offsety><offsetz><effballr>
<error>	:=	<errorid><machid>
<white>	:=	(' '|0x0b)$n ($n => repeat 0 or more times)
<machid>	:=	<integer><white>
<progid>	:=	<string><white>
<index>	:=	<integer><white>
<featid>	:=	<integer><white><integer><white> (High , low id number)
<wrkoffset>	:=	<"G54"><"G55"><"G56"><"G57"><"G58"><"G59">
<probeid>	:=	<string><white>
<tipid>	:=	<string><white>
<x>	:=	<numberfield>
<y>	:=	<numberfield>
<z>	:=	<numberfield>
<a>	:=	<numberfield>
<b>	:=	<numberfield>
<c>	:=	<numberfield>
<offsetx>	:=	<numberfield>
<offsety>	:=	<numberfield>
<offsetz>	:=	<numberfield>
<effballr>	:=	<numberfield>
<errorid>	:=	<pnf>|<unexphit>|<machine_err>
<units>	:=	<'I' | 'M'>
<integer>	:=	<digit>$k ($k => repeat 1 or more times)
<string>	:=	<">(<alphanumeric>$k)<">
<numberfield>	:=	(<digit>$n)<white> \| (<digit>$n)<'.'>(<digit>$k)<white>

\<vectorfield\> :=	\<numberfield\> where the vector is normalized to $\|vec\| = 1$	
\<pnf\> :=	\<'91'\>\<white\>	
\<unexphit\> :=	\<'92'\>\<white\>	
\<machine_err\>:=	\<'93'\>\<white\>	
\<units_mismatch\> :=	\<'95'\>\<white\>	

\<digit\> :=   \<'0'\>|\<'1'\>|\<'2'\>|\<'3'\>|\<'4'\>|\<'5'\>|\<'6'\>|\<'7'\>|\<'8'\>|\<'9'\>

\<alphanumeric\> :=   all iso printable ascii characters including white space